Arthroscopic hip surgery compared with personalised hip therapy in people over 16 years old with femoroacetabular impingement syndrome: UK FASHION RCT

Damian R Griffin,^{1,2*} Edward J Dickenson,^{1,2} Felix Achana,¹ James Griffin,¹ Joanna Smith,² Peter DH Wall,^{1,2} Alba Realpe,¹ Nick Parsons,¹ Rachel Hobson,¹ Jeremy Fry,³ Marcus Jepson,⁴ Stavros Petrou,¹ Charles Hutchinson,^{1,2} Nadine Foster⁵ and Jenny Donovan⁴

Declared competing interests of authors: Damian R Griffin is a surgeon with a hip preservation practice that includes treating femoroacetabular impingement syndrome and hip arthroscopy, and he reports consulting and teaching fees from Stryker UK (Newbury, UK) and Smith & Nephew UK (Watford, UK), outside the submitted work. Joanna Smith is a physiotherapist who treats patients with femoroacetabular impingement syndrome. Peter DH Wall is a hip surgeon who treats patients with femoroacetabular impingement syndrome. Nadine Foster is a member of Clinical Trial Units that were funded by the National Institute for Health Research until 2021 and was a member of the Health Technology Assessment Primary Care, Community and Preventive Interventions Panel (2010–15). Jenny Donovan reports membership of the Rapid Trials and Add-on Studies Board (2012 to present) and the Health Technology Assessment Commissioning Committee (2006–12).

Published February 2022 DOI: 10.3310/FXII0508

¹Warwick Medical School, University of Warwick, Coventry, UK

²University Hospitals of Coventry and Warwickshire NHS Trust, Coventry, UK

³Lay person, Reading, UK

⁴Bristol Medical School, University of Bristol, Bristol, UK

⁵Arthritis Research UK Primary Care Centre, Research Institute for Primary Care and Health Sciences NIHR, Keele University, Keele, UK

^{*}Corresponding author damian.griffin@warwick.ac.uk

Plain English summary

The UK FASHION RCT

Health Technology Assessment 2022; Vol. 26: No. 16

DOI: 10.3310/FXII0508

NIHR Journals Library www.journalslibrary.nihr.ac.uk

Plain English summary

n some people, the ball and the socket of the hip joint develop so that they do not fit together properly. This is called hip impingement, and is an important cause of hip and groin pain in young and middle-aged adults. Treatments include physiotherapy and surgery. Physiotherapy typically involves a programme of 6–10 outpatient consultations that aim to strengthen the muscles around the hip: we called this personalised hip therapy. Surgery can be carried out by a keyhole operation, called a hip arthroscopy, which aims to reshape the hip to prevent impingement. Surgery is normally followed by some physiotherapy. We performed a research study to compare the results of hip arthroscopy and personalised hip therapy in people with hip impingement.

A total of 348 people with painful hip impingement in 23 hospitals in the UK agreed to take part. About half were treated with hip arthroscopy and half with personalised hip therapy. We used questionnaires to ask participants about pain in the hip and their ability to do everyday things at 6 months and 1 year after entering the study. At 2 and 3 years, we asked if patients required any additional treatments.

We found that both groups improved, but those treated with hip arthroscopy improved a moderate amount more than those treated with personalised hip therapy. However, these improvements were not cost-effective compared with personalised hip therapy at 1 year.

We need to see whether or not this difference continues after several years, but the results, so far, suggest that if a person has painful hip impingement, then hip arthroscopy offers greater improvements than personalised hip therapy.

Health Technology Assessment

ISSN 1366-5278 (Print)

ISSN 2046-4924 (Online)

Impact factor: 4.014

Health Technology Assessment is indexed in MEDLINE, CINAHL, EMBASE, the Cochrane Library and Clarivate Analytics Science Citation Index.

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) (www.publicationethics.org/).

Editorial contact: journals.library@nihr.ac.uk

The full HTA archive is freely available to view online at www.journalslibrary.nihr.ac.uk/hta. Print-on-demand copies can be purchased from the report pages of the NIHR Journals Library website: www.journalslibrary.nihr.ac.uk

Criteria for inclusion in the Health Technology Assessment journal

Reports are published in *Health Technology Assessment* (HTA) if (1) they have resulted from work for the HTA programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

Reviews in *Health Technology Assessment* are termed 'systematic' when the account of the search appraisal and synthesis methods (to minimise biases and random errors) would, in theory, permit the replication of the review by others.

HTA programme

Health Technology Assessment (HTA) research is undertaken where some evidence already exists to show that a technology can be effective and this needs to be compared to the current standard intervention to see which works best. Research can evaluate any intervention used in the treatment, prevention or diagnosis of disease, provided the study outcomes lead to findings that have the potential to be of direct benefit to NHS patients. Technologies in this context mean any method used to promote health; prevent and treat disease; and improve rehabilitation or long-term care. They are not confined to new drugs and include any intervention used in the treatment, prevention or diagnosis of disease.

The journal is indexed in NHS Evidence via its abstracts included in MEDLINE and its Technology Assessment Reports inform National Institute for Health and Care Excellence (NICE) guidance. HTA research is also an important source of evidence for National Screening Committee (NSC) policy decisions.

This report

The research reported in this issue of the journal was funded by the HTA programme as project number 13/103/02. The contractual start date was in April 2014. The draft report began editorial review in November 2019 and was accepted for publication in August 2021. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health and Social Care. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health and Social Care.

Copyright © 2022 Griffin et al. This work was produced by Griffin et al. under the terms of a commissioning contract issued by the Secretary of State for Health and Social Care. This is an Open Access publication distributed under the terms of the Creative Commons Attribution CC BY 4.0 licence, which permits unrestricted use, distribution, reproduction and adaption in any medium and for any purpose provided that it is properly attributed. See: https://creativecommons.org/licenses/by/4.0/. For attribution the title, original author(s), the publication source – NIHR Journals Library, and the DOI of the publication must be cited.

Published by the NIHR Journals Library (www.journalslibrary.nihr.ac.uk), produced by Prepress Projects Ltd, Perth, Scotland (www.prepress-projects.co.uk).

NIHR Journals Library Editor-in-Chief

Professor Ken Stein Professor of Public Health, University of Exeter Medical School, UK

NIHR Journals Library Editors

Professor John Powell Chair of HTA and EME Editorial Board and Editor-in-Chief of HTA and EME journals. Consultant Clinical Adviser, National Institute for Health and Care Excellence (NICE), UK, and Professor of Digital Health Care, Nuffield Department of Primary Care Health Sciences, University of Oxford, UK

Professor Andrée Le May Chair of NIHR Journals Library Editorial Group (HSDR, PGfAR, PHR journals) and Editor-in-Chief of HSDR, PGfAR, PHR journals

Professor Matthias Beck Professor of Management, Cork University Business School, Department of Management and Marketing, University College Cork, Ireland

Dr Tessa Crilly Director, Crystal Blue Consulting Ltd, UK

Dr Eugenia Cronin Consultant in Public Health, Delta Public Health Consulting Ltd, UK

Dr Peter Davidson Consultant Advisor, Wessex Institute, University of Southampton, UK

Ms Tara Lamont Senior Adviser, Wessex Institute, University of Southampton, UK

Dr Catriona McDaid Reader in Trials, Department of Health Sciences, University of York, UK

Professor William McGuire Professor of Child Health, Hull York Medical School, University of York, UK

Professor Geoffrey Meads Emeritus Professor of Wellbeing Research, University of Winchester, UK

Professor James Raftery Professor of Health Technology Assessment, Wessex Institute, Faculty of Medicine, University of Southampton, UK

Dr Rob Riemsma Reviews Manager, Kleijnen Systematic Reviews Ltd, UK

Professor Helen Roberts Professor of Child Health Research, Child and Adolescent Mental Health, Palliative Care and Paediatrics Unit, Population Policy and Practice Programme, UCL Great Ormond Street Institute of Child Health, London, UK

Professor Jonathan Ross Professor of Sexual Health and HIV, University Hospital Birmingham, UK

Professor Helen Snooks Professor of Health Services Research, Institute of Life Science, College of Medicine, Swansea University, UK

Professor Ken Stein Professor of Public Health, University of Exeter Medical School, UK

Professor Jim Thornton Professor of Obstetrics and Gynaecology, Faculty of Medicine and Health Sciences, University of Nottingham, UK

Please visit the website for a list of editors: www.journalslibrary.nihr.ac.uk/about/editors

Editorial contact: journals.library@nihr.ac.uk